

In the claims:

Please cancel, without prejudice, claim 21.

Please add new claims 23-25.

1. **(Withdrawn)** A DNA sequence other than present in a chromosome encoding a *patched* gene other than the *Drosophila patched* gene or fragment thereof of at least about 12 bp different from the sequence of the *Drosophila patched* gene.
2. **(Withdrawn)** A DNA sequence according to claim 1, wherein said *patched* gene is a mammalian gene.
3. **(Withdrawn)** A DNA sequence according to claim 1 for human, mouse, mosquito, butterfly or beetle *patched* gene.
4. **(Withdrawn)** A DNA sequence according to claim 3, wherein said DNA sequence is a human sequence.
5. **(Withdrawn)** A DNA sequence according to claim 4, wherein said DNA sequence is a mouse sequence.
6. **(Withdrawn)** A DNA sequence according to claim 1, wherein said DNA sequence is a fragment of at least about 18bp.
7. **(Withdrawn)** A DNA sequence according to a claim 1 joined to a DNA sequence comprising a restriction enzyme recognition sequence.
8. **(Withdrawn)** An expression cassette comprising a transcriptional initiation region functional in an expression host, a DNA sequence according to claim 1 under the transcriptional regulation of said transcriptional initiation region, and a transcriptional termination region functional in said expression host.

9. **(Withdrawn)** An expression cassette according to claim 8, wherein said transcriptional initiation region is heterologous to said DNA sequence according to claim 1.
10. **(Withdrawn)** An expression cassette according to claim 8, wherein said transcriptional initiation region is homologous to said DNA sequence according to claim 1 and includes the enhancer region.
11. **(Withdrawn)** A cell comprising an expression cassette according to any one of claims 8 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell and the cellular progeny of said host cell.
12. **(Withdrawn)** A cell according to claim 11, further comprising the *patched* protein in the cellular membrane of said cell.
13. **(Withdrawn)** A cell according to claim 11, wherein said *patched* protein is a mouse *patched* protein.
14. **(Withdrawn)** A cell according to claim 11, wherein said *patched* gene is a human *patched* protein.
15. **(Withdrawn)** A cell according to claim 11, wherein said transcriptional initiation region is a *Drosophila patched* gene transcriptional initiation region comprising the promoter and enhancer joined to a heterologous gene.
16. **(Withdrawn)** A cell comprising an expression cassette comprising a transcriptional initiation region functional in an expression host, said transcriptional initiation region consisting of a 5' non-coding region regulating the transcription of patched protein comprising the promoter and enhancer, a marker gene, and a transcriptional termination region, as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host, and the cellular progeny thereof.

17. **(Withdrawn)** A cell according to claim 16, wherein said transcriptional initiation region is the *Drosophila* region.

18. **(Withdrawn)** A method for following embryonic development employing the *patched* protein in an embryo, said method comprising:

integrating an expression cassette comprising a transcriptional initiation region functional in embryonic host cells, said transcriptional initiation region consisting of a 5' non-coding region regulating the transcription of patched protein, a marker gene, and a transcriptional termination region, wherein said embryonic host cells are capable of developing into a fetus;

growing said embryonic host cells, whereby proliferation and differentiation occur; and
locating cells comprising expression of the *patched* protein by means of expression of said marker gene.

19. **(Withdrawn)** A method for producing *patched* protein, said method comprising:
growing a cell according to claim 11, whereby said *patched* protein is expressed; and
isolating said *patched* protein free of other proteins.

20. **(Currently amended)** A method ~~for~~ of screening for candidate compounds for binding affinity that bind to the *a patched* protein, said method comprising:

(a) combining said a candidate compound with a ~~vertebrate or invertebrate~~ cell comprising said ~~patched~~ protein in the membrane of said cell and an expression cassette further comprising (i) a transcriptional initiation region functional in said cell, (ii) a transcriptional termination region, and (iii) a DNA nucleic acid sequence encoding the *patched* protein according to claim 1 comprising the entire coding sequence under the transcriptional regulation of said transcriptional initiation region[,] and a said transcriptional termination region functional in said cell, expressing said *patched* protein in said cell, wherein said nucleic acid sequence (I) is expressed in the membrane of said cell and (II) hybridizes under stringent conditions, including a wash step of 0.2X SSC at 65 °C, to the nucleic acid sequence represented in SEQ ID NO: 9 or SEQ ID NO: 18, and wherein the *patched* protein can bind to a hedgehog polypeptide; and
(b) assaying for the binding of said candidate compound to said *patched* protein.

21. (Cancelled)
22. (Withdrawn) A monoclonal antibody binding specifically to a *patched* protein, other than the *Drosophila* patched protein.
23. (New) The method of claim 20, wherein said cell is a mammalian cell.
24. (New) The method of claim 20, wherein the *patched* protein is encoded by a nucleic acid sequence represented in SEQ ID NO: 9 or SEQ ID NO: 18.
25. (New) The method of claim 20, wherein the *patched* protein comprises an amino acid sequence represented in SEQ ID NO: 10 or SEQ ID NO: 19.